Ambidexterity and Evidence-Based Management Practice:

Cases from Major League Baseball (MLB)

Abstract

The emergence of *organizational ambidexterity* (i.e., finding the balance between core competencies and innovation) is an important topic not only to management researchers, but also to practitioners and coaches in organizational development practice. Traditionally, ambidexterity has been studied at organizational levels of analysis, most predominantly in high technology settings. However, there is a need to understand how ambidexterity is informed in day-to-day management, decision-making, and evidenced-based management (EBM) practice in other contexts. In this teaching session, we begin to tackle these issues by examining how ambidexterity challenges can be informed by EBM through cases from professional baseball, where decision-making traps may run the organization afoul. Furthermore, the utilization of predictive analytics in this sport have been well-established and often used for exploitative and explorative purposes. We conclude this session by illustrating how these cases can be linked to other organizational contexts and made useful for managers and organizational development practitioners.

Keywords: ambidexterity development, decision-making traps, evidence-based management (EBM), Major League Baseball (MLB)

Introduction

Organizational ambidexterity begins with a basic contention: How can organizations and their individuals develop core operations through the tapping of expertise and competencies while not compromising the need to build for innovation? Implicitly, this concept asks: what may inhibit companies and their managers from doing so? Although this topic, along with how best to integrate both "handed" functions has been long debated among organizational and strategy researchers (i.e., for over 40 years), there has been overwhelming support that organizations that are able to do so achieve higher levels of performance (see O'Reilly & Tushman, 2008, 2013, 2016 for an extensive review). Previous research also poses a variety of questions related to finding a balance in ambidexterity. As O'Reilly & Tushman (2008, 2013) note in their review of ambidexterity in other scholars' work, are these functions paradoxical or complementary activities? Do they occur at different lifecycles of the organization and performance? How can they be better managed or directed? Among the debates found in organizational research to achieve ambidexterity, there are three dominant approaches that have attempted to disentangle these questions and have been reviewed extensively by ambidexterity scholars.

We summarize them as including: 1) the structural perspective (i.e., whether ambidexterity can be facilitated through simply structural alignment, such as knowing when and how to allocate resources to exploit core operations while allocating exploration to research and development units); 2) whether exploitation and exploration both need to be embedded into the culture of the organization (i.e., the contextual ambidexterity perspective; see Gibson & Birkinshaw, 2004 and Nieto-Rodriguez, 2014); and finally, and 3) how can individual managers and leaders – not just top management teams create "ambidexterity continuity or shift" in organizations (e.g., Wang and Gibbons, 2016). This more recent tradition is referred to as

"managerial ambidexterity". While these three approaches (structural, contextual, and managerial) provide different lenses as to how ambidexterity can be potentially enabled and taught, they all begin and end with the search of evidence. Specifically, they focus on how knowledge can be recognized, integrated (or conversely separated) from core activities, and how that knowledge can be utilized effectively.

Theoretical Foundations: Linking EBM to Ambidexterity – And Why Baseball

In this regard, evidence-based management is critical toward understanding what facilitates and prevents better exploitation of core competencies with the need for innovation. Ambidexterity can be linked back to the nature of knowledge (e.g., Lengick-Hall & Griffith, 2011) and how it might impact cognitive ambidexterity (i.e., how one thinks about or facilitates analogies near or far with information; Karhu, Ritala, & Viola, 2016) – both of which depend upon evidence-based management.

Rousseau (2006) defines Evidence-Based Management (EBM) as the incorporation of scientific principles, systematic review of facts, and decision aids (Rousseau, 2006). While EBM has been studied over the past several decades through the scientific gathering of evidence in health care and total management quality systems to detect and isolate errors, EBM may also incorporate alternative forms of evidence-based management practices, such as field-based methods and experiments not just scientifically gathered evidence including those used at design firms like IDEO. EBM implicitly argues that all forms of data can be equally valued. Specifically, the use of controls in evaluating their quality and effectiveness as appropriate to organizational goals and expertise is a key facet in this process. This practice also posits that such strategies can influence exploitation and exploration potential differently.

Jackson and Leung (2018) make more explicit this case in the context of ambidexterity-building by providing four strategies that define how various forms of evidence and their management can lead to greater shift and balance between exploitation and exploration activities. Their work specifically defines and differentiates these strategies into high and low regulation, or compliance, settings. They include four core strategies – two that lean more on exploration – including *transformative* and *symbiotic* EBM strategies found in less regulated settings – and two that lean more on exploitation – *projective* and *preservation* – that are found in more compliance driven settings.

While beneficial to these contexts, one of the challenges with the Jackson and Leung (2018) framework is that they isolate each of the four EBM strategies to a specific industry context, such as more exploitation being found in hospitals or pharmaceuticals as opposed to exploratory EBM ambidexterity strategies being found in more marketing and design-focused companies. However, it is also foreseeable that all four EBM, ambidexterity-building or prohibitive strategies (i.e., transformative, symbiotic, projective and preservative) can operate equally in a predictively analytically rich setting such as baseball.

In this regard, the management of professional baseball teams has had an extensive history in how the nature of evidence (i.e., the finding and gathering of evidence) can spawn these different trajectories in performance and hiring practices (see Chan & Fearing, 2018; Elitzur, 2018). Specifically, the use of evidence may open up or hamper different teams' abilities to fully facilitate or shift in requisite levels of exploitation versus exploration or vice-versa both within and across levels of the organization (see Humphreys & Pyun, 2017 for an example). Given the popularized trends where companies are increasingly relying on data, predictive analytics, and evidence-based management to drive performance and general management

strategies, there is greater need to show in teaching practices how and in what alternative contexts evidence and data can be used to build ambidexterity. Through our teaching application of these four EBM-ambidexterity strategies, we show how they might expose specific opportunities but also issues (i.e., decision-making traps) through data sensitization, verification, and how managerial wisdom is framed by data and decision-making practices in this regard.

Learning Objectives

With the above in mind, the focus of our session is to illuminate how ambidexterity can occur differently through the lenses of EBM. Our objectives are three-fold:

- 1) To provide a review of organizational ambidexterity, its three dominant approaches (structural, contextual, managerial), and where EBM practice may shed greater insight into ambidexterity, shift, continuity, and hampering
- 2) To provide an alternative context (i.e., professional baseball) where and how EBMambidexterity building strategies can be leveraged and taught
- 3) From the discussion of these points, we aim to offer an understanding of what might be learned from baseball, where the use of EBM and predictive analytics have been a long-standing practice and grounds to understand exploitation and exploration building, as well as in application to other organizational examples

As preparation points, we suggest that those who are less familiar with organizational ambidexterity and the Jackson and Leung (2018) framework skim through the following two articles in advance.

- https://www.london.edu/faculty-and-research/lbsr/organisational-ambidexterity
- https://www.emeraldinsight.com/doi/abs/10.1108/SL-03-2018-0027

Session Description and Plan

To achieve our learning objectives, our session is planned as follows:

Format

General overview of ambidexterity, and the Jackson & Leung (2018) framework
with two sample activities - one with four scenario applications to baseball
management and the other with extensions to other organizational applications for
general discussion

• Course Level

 Undergraduate and/or graduate students particularly those in strategic management classrooms

Classroom Style

o Traditional classroom environment

• Materials Needed

o Four flipcharts, computer, and projector

• Time Requested

 We will divide the requested 90 minutes of the general discussion and inquiry exercise into three parts (i.e., Parts A, B, and C). See our description of these parts below.

Exercise/Activity Overview

- Part A: A Review of "Ambidexterity", How It Has Been Studied/Taught, and Why
 EBM Approaches Are Necessary (15 minutes)
 - This discussion will entail a brief PowerPoint review of what organizational ambidexterity is, how it has been studied in organizational strategy and development practice, and its limitations. We then turn to what EBM is and how it can be utilized to diagnose how data management and evaluation practices defined in part by the context but also how they can help to engage in different levels of ambidexterity (exploitation v. exploration differently). Please see the note above for readings that will be used for preparation.
 - The focal point of Part A is to provide enough background into the ambidexterity challenges facing organizations today but to also familiarize participants with the Jackson and Leung (2018) framework that positions how EBM and data management can be used for different levels of ambidexterity-building in organizations.
- Part B: Extending Understanding of EBM and Ambidexterity to Case Examples from Baseball (60 minutes)
 - o From, Part A, we then introduce two exercises in succession.
 - Exercise 1 (30 minutes) The first exercise will present four case scenarios from Major League Baseball (MLB) management (i.e., involving the Minnesota Twins, Oakland Athletics, Chicago Cubs, and Boston Red Sox) that exemplify each of the four EBM-ambidexterity building strategies from the Jackson and Leung (2018) framework. For participants who may be unfamiliar with MLB, we

will also offer a very succinct background on the exemplary baseball teams. As part of this activity, we will also have participants examine and discuss what may limit ambidexterity in data and evidence-management by pairing this activity to common decision-making traps. We utilize the Hammond et al. article to isolate how EBM and ambidexterity can lead into specific decision-making biases but here applied to exploitation v. exploration

- o For reference, participants will read the following:
 - https://www.stratplanning.com/the-7-traps-in-decision-making-and-howto-avoid-them/
- Exercise 2 (30 minutes) From this first exercise, we then segue-way into a second exercise where we will have participants apply what they learned from the various baseball examples to other organizational examples in the use of the evidence. As a starting point, we provide corporations, such as IBM and Zara, in how they have utilized the four different EBM and ambidexterity strategies in unique ways to direct their use of data and analytics.
- Part C: Debrief and Wrap-Up (15 20 Minutes) The remaining time will have participants identify 3-4 key learnings and alternative applications from the session that they would like to apply in the teaching of "ambidexterity-building" to organizational applications.

Application to Conference Theme and Unique Contribution to MOBTS

Organizational ambidexterity has been long attributed to the success of organizations — especially those functioning in competitive markets (see O'Reilly & Tushman, 2008; 2013; and 2016 for an extensive review and examples). Yet, at its core, ambidexterity depends on how managers and individuals can frame, utilize, and deploy knowledge and evidence effectively. Given the increased complexity facing organizations today, managers and leaders need better "diagnostic tools" to recognize when and how their utilization of information prohibits them from realizing organizational advancements along with positive agents of change. Moreover, there needs to be more comprehensive understanding as to which contexts may open up alternative opportunities to understand and wrestle with this issue (e.g., in professional baseball). Through an extended use and application of the Jackson and Leung (2018) EBM and ambidextrous organizations framework, we offer how four EBM-ambidexterity strategies can be applied within a specific industry context, and then employed in teaching practices to organizations around this issue.

Acknowledgements of First-Time Submission of This Work

This is the first time this proposal will be presented at MOBTS or at any conference for that matter.

References

Chan, T. C., & Fearing, D. 2018. Process flexibility in baseball: The value of positional flexibility. *Management Science*.

Elitzur, R. 2018. Data analytics effects in Major League Baseball. Omega.

Gibson, C. B. and J. Birkinshaw 2004. The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal*. 47: 209–226.

Hammond, J.S., Keeney, R.L., & Raiffa, H.2013. The hidden traps in decision-making. *Harvard Business Review*. Retrieved from https://hbr.org/1998/09/the-hidden-traps-in-decision-making-2

Humphreys, B. R., & Pyun, H. 2017. Monopsony exploitation in professional sport: Evidence from Major League Baseball position players, 2000–2011. *Managerial and Decision Economics*. 38(5): 676-688.

Jackson, N. & Leung, O. 2018 Evidence-based management for "ambidextrous" organizations. *Strategy and Leadership.* 46(4): 28 - 36.

Karhu, Ritala, & Viola. 2016. How do ambidextrous teams create new products? Cognitive ambidexterity, analogies, and new product creation. *Knowledge and Process Management: The Journal of Corporate Transformation*. 23(1): 3-17.

Lengnick-Hall, C.A., & Griffith, R. J. 2011. Evidence-base versus tinkerable knowledge as strategic assets: a new perspective on the interplay between innovation and application. *Journal of Engineering and Technology Management*. 28(3): 147-167.

Nieto-Rodriguez, A. 2014. Organisational ambidexterity. *London Business School*. Retrieved from https://www.london.edu/faculty-and-research/lbsr/organisational-ambidexterity

O'Reilly, C.A. & Tushman, M.L. 2008. Ambidexterity as a Dynamic Capability: Resolving the Innovator's Dilemma. *Research in Organizational Behavior*. 28: 185–206.

O'Reilly, C.A. & Tushman, M.L. 2016. *Lead and Disrupt: How to Solve the Innovator's Dilemma*. Stanford, CA: Stanford University Press.

O'Reilly, C.A. & Tushman, M.L. 2013. Organizational ambidexterity: Past, present, future. Academy of Management Perspectives. 27(4): 324 - 338.

Rousseau, D.M. 2006. Is there such as thing as "evidence-based management"? Academy of Management Review. 31(2): 256 – 269.

Wang, R. & Gibbons, P.T. 2016. Managerial ambidexterity: a political skills perspective. Academy of Management Proceedings. Retrieved from https://journals.aom.org/doi/abs/10.5465/ambpp.2016.15940abstract